TABLE 15.--ENGINEERING TEST DATA

[NP means nonplastic]

Soil name, report number, horizon, and depth in inches	Classification		Grain size distribution[1]										Liquid limit[2]	Plasticity index[2]	Specific gravity	Shrinkage		
			Percentage passing sieve--							Percentage smaller than--								
	AASHTO	Unified	7/4 inch	5/8 inch	3/8 inch	No. 4	No. 10	No. 40	No. 200	.05 mm	.005 mm	.002 mm				Limit	Linear	Ratio
													Pct		G/cc	Pct	Pct	Pct
Acuna silty clay:[3] (S78TX-465-002)																		
A1------- 0 to 18	A-7-6(25)	CL	100	100	100	100	99	98	92	87	60	45	46	26	2.67	15.0	13.8	1.8
B21------18 to 30	A-7-6(24)	CL	100	100	100	99	99	97	93	89	65	51	44	25	2.68	15.0	13.4	1.8
B23ca----38 to 60	A-6 (18)	CL	100	100	100	99	98	97	93	89	65	43	37	19	2.71	16.0	10.2	1.8
Coahuila clay loam:[4] (S77TX-465-006)																		
A1------- 0 to 9	A-6 (14)	CL	100	100	100	100	99	98	88	79	47	30	35	16	2.67	17.0	9.3	1.8
B21------ 9 to 22	A-6 (19)	CL	100	100	100	100	99	98	91	86	55	40	39	20	2.69	17.0	10.4	1.8
B23ca----33 to 62	A-6 (15)	CL	100	100	100	100	99	99	94	90	62	42	35	16	2.71	18.0	8.7	1.8
Felipe very gravelly clay:[5] (S77TX-465-003)																		
A1------- 0 to 5	A-7-6(07)	GC	100	85	81	69	59	49	45	43	30	24	46	26	2.69	16.0	13.4	1.7
B2------- 5 to 18	A-7-6(28)	CL	100	100	99	99	98	96	94	91	69	52	46	28	2.74	16.0	14.1	1.8
Cr-------18 to 22	A-7-6(25)	CL	100	100	100	99	98	96	94	92	61	46	45	25	2.80	19.0	12.0	1.7
Hodgins silt loam:[6] (S78TX-465-007)																		
A1------- 0 to 8	A-6 (10)	CL	100	100	100	100	100	99	93	83	36	24	31	11	2.68	19.0	6.4	1.7
B2------- 8 to 20	A-6 (14)	CL	100	100	100	100	100	98	95	89	55	38	35	15	2.66	19.0	8.3	1.7
B3ca-----45 to 62	A-6 (10)	CL	100	100	100	95	86	76	67	64	41	32	34	18	2.70	15.0	9.7	1.8
Lagloria loam:[7] (S77TX-465-004)																		
A12------ 6 to 18	A-4 (02)	ML	100	100	100	100	100	100	69	55	14	10	27	5	2.69	21.0	3.2	1.6
B22ca----31 to 42	A-4 (03)	ML	100	100	100	100	100	100	79	66	22	16	27	5	2.66	20.0	3.6	1.7
Cca------42 to 72	A-4 (06)	CL	100	100	100	100	100	100	86	70	24	18	28	8	2.68	20.0	4.7	1.7
Laredo silty clay loam:[8] (S77TX-465-005)																		
Ap------- 0 to 7	A-6 (20)	CL	100	100	100	100	100	99	91	82	44	33	39	22	2.66	16.0	11.3	1.8
B2-------13 to 32	A-7-6(25)	CL	100	100	100	100	100	99	93	87	54	43	42	26	2.69	15.0	13.1	1.9
Cca------42 to 60	A-6 (20)	CL	100	100	100	100	98	97	93	87	56	40	37	22	2.70	15.0	10.2	1.9
Reynosa silty clay loam:[9] (S77TX-465-008)																		
Ap------- 0 to 8	A-6 (17)	CL	100	100	100	100	100	99	92	82	46	31	37	18	2.68	16.0	10.3	1.8
B22ca----24 to 40	A-6 (18)	CL	100	100	100	99	98	97	91	87	56	43	36	20	2.71	15.0	10.7	1.9
B23ca----40 to 58	A-6 (17)	CL	100	100	100	100	99	98	92	86	53	37	34	19	2.71	14.0	10.4	1.9

See footnotes at end of table.

TABLE 15.--ENGINEERING TEST DATA--Continued

Soil name, report number, horizon, and depth in inches	Classification		Grain size distribution[1]										Liquid limit[2]	Plasticity index[2]	Specific gravity	Shrinkage		
			Percentage passing sieve--							Percentage smaller than--								
	AASHTO	Unified	7/4 inch	5/8 inch	3/8 inch	No. 4	No. 10	No. 40	No. 200	.05 mm	.005 mm	.002 mm				Limit	Linear	Ratio
													Pct		G/cc	Pct	Pct	Pct
Rio Grande silt loam:[10] (S77TX-465-009)																		
A1------- 0 to 9	A-4 (05)	ML	100	100	100	100	100	100	87	74	18	13	31	6	2.68	22.0	4.3	1.6
C3-------33 to 51	A-6 (12)	CL	100	100	100	100	100	100	97	87	30	20	35	12	2.70	21.0	7.0	1.6
Valverde silty clay loam:[11] (S77TX-465-010)																		
A1------- 0 to 12	A-6 (13)	CL	100	100	100	98	96	91	82	77	40	31	37	17	2.67	18.0	9.4	1.8
B2-------12 to 32	A-6 (13)	CL	100	96	94	90	83	77	71	66	42	32	40	20	2.71	17.0	10.8	1.8
Vinegarroon gravelly loam:[12] (S77TX-465-001)																		
A1------- 0 to 7	A-6 (05)	CL	100	99	95	85	75	67	60	54	27	17	31	12	2.69	18.0	6.7	1.7
B2ca----- 7 to 17	A-6 (07)	CL	100	100	94	84	73	65	59	55	30	22	36	16	2.66	19.0	8.3	1.7

[1]For soil materials larger than 3/8 inch, square mesh wire sieves were used that are slightly larger than equivalent round sieves, but these differences do not seriously affect the data.

[2]Liquid limit and plasticity index were determined by AASHTO methods T 89 and T 90 except that soil was added to water.

[3]Acuna silty clay: from junction of U.S. Highway 90 and Ranch Road 2523 east of Del Rio, 8.3 miles northeast on Ranch Road 2523, 0.3 mile west, 75 feet north.

[4]Coahuila clay loam: from junction of U.S. Highway 90 and U.S. Highway 277 in Del Rio, 8.6 miles east on U.S. Highway 90, 100 feet north.

[5]Felipe very gravelly clay: from junction of U.S. Highway 277 and U.S. Highway 90 north of Del Rio, 14 miles west on U.S. Highway 90, 6 miles southwest, 700 feet north.

[6]Hodgins silt loam: from junction of U.S. Highway 90 and Ranch Road 1865 about 14 miles northwest of Langtry, 5.8 miles north, 1.35 miles east, 50 feet south.

[7]Lagloria loam: from junction of U.S. Highway 277 and U.S. Highway 90 in Del Rio, 0.25 mile south and 4 miles southeast on U.S. Highway 277, 4.1 miles southwest, 180 feet south.

[8]Laredo silty clay loam: from junction of U.S. Highway 277 and U.S. Highway 90 in Del Rio, 2.3 miles west, 0.35 mile southwest, 175 feet east.

[9]Reynosa silty clay loam: from junction of U.S. Highway 90 and U.S. Highway 277 in Del Rio, 0.25 mile south, 1 block southwest, 1 mile south, 700 feet southwest.

[10]Rio Grande silt loam: from junction of U.S. Highway 90 and U.S. Highway 277 in Del Rio, 0.25 mile south, 3 miles southeast, 2.2 miles southwest on ranch road, 1 mile south, 150 feet west.

[11]Valverde silty clay loam: from junction of U.S. Highway 90 and U.S. Highway 277 north of Del Rio, 15 miles northwest on U.S. Highway 90, 7.2 miles southwest on private road, 200 feet west.

[12]Vinegarroon gravelly loam: from junction of U.S. Highway 277 and U.S. Highway 90 north of Del Rio, 0.1 mile northwest on U.S. Highway 90, 0.25 mile west, 600 feet northwest.